

3.5 TENNESSEE RIVER BASIN FRENCH BROAD RIVER – LITTLE PIGEON RIVER – EAST FORK/DUNN CREEK



DESCRIPTION and EXTENT OF PROBLEM

According to the 1998 303(d) List, more than 107 miles of the Little Pigeon River – East Fork/Dunn Creek is partially supporting due to nutrient and sediment loadings from agricultural activities. East Fork is the only agricultural subwatershed in Little Pigeon River watershed.

1998 303(d) LIST

WATERSHED NAME

Little Pigeon River-East Fork-Dunn Creek

SOURCES

nutrients & siltation/agriculture

SUBWATERSHED ROTATIONAL PLAN

The East Fork of the Little Pigeon River watershed will receive 319 funding through the FY-00/UWA grant. The Dunn Creek subwatershed was selected because of its agricultural predominance. As the FY-00 UWA grant progresses the project manager, Sevier County SCD, should be able to determine, with assistance from TDEC, which Little Pigeon River subwatershed should be addressed next with UWA funding.

As is common in most of the UWA watersheds, agricultural BMP activity is more advanced than other nonpoint source issues. Most of the remaining subwatersheds within the Little Pigeon River watershed are highly developed by commercial and residential activities. Yet, time should demonstrate a growing level of expertise in the construction and urban runoff issues, thereby allowing other subwatersheds that are less agriculturally oriented, to be addressed with UWA funds.

It is important to note that while these UWA efforts are on going the base grants will also be funding demonstration BMPs and public awareness efforts throughout the watershed. These efforts will address failing septic systems, construction, and possibly urban runoff issues. These nonpoint source issues could be intensely addressed once a probable cooperating partner, the U.S. Army Corps of Engineers, has established goals for its Little Pigeon River – West Prong water quality project.

COOPERATING PARTNERS

Partners

Local developers & home builders
Local landowners
Sevier County government
Sevier County Soil Conservation District
Smoky Mountain RC&D Council
Tennessee Department of Agriculture
 Ag Resources Conservation Program
Tennessee Department of Environment & Conservation
 Division of Water Pollution Control
 Division of Water Supply

Abbreviations

SCSCD
SM RC&D

TDA-ARC

TDEC-WPC
TDEC-DWS

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Tennessee Department of Health	TDH-DLS
Division of Lab Services	
Tennessee Home Builders Association	THBA
Tennessee Valley Authority	TVA
Resource Stewardship Watershed Team Program	
U.S. Army Corps of Engineers	USACE
U.S. Department of Agriculture	
Natural Resource Conservation Service	USDA-NRCS
U.T. Institute of Agriculture	UTIA
U.T.-County Technical Assistance Service	UT-CTAS

Local developers & home builders

Sevier County is rapidly growing with many rural areas becoming sub-urbanized. Agricultural-related problems are giving way to construction and urban runoff problems, an issue, which can be minimized if developers, contractors, and home builders make the effort to eliminate sediment loadings and high stormwater discharges. The TDA-NPS Program has coordinated with local officials, through a FY-99 grant project to introduce nonpoint source technologies to the area.

Local landowners

Landowners will be requested to participate in the implementation of BMPs by allowing the BMP to be placed on their property, contributing to the construction of the BMP through in-kind services, and maintaining the BMP for a pre-determined or indefinite period of time. These same landowners will also be required to allow others to visit the BMP once it has been fully constructed.

Sevier County government

As Sevier County residential and commercial growth continues to take the remaining farmlands of the Little Pigeon River – East Fork watershed, its officials and residents will need to remain aware of and protect the existing Ag-related remediation work already in place. More importantly, government officials need to assume a leadership role in the nps effort by establishing water quality control measures for all construction sites and stormwater problem areas as growth continues.

Sevier County Soil Conservation District (SCD)

The SCD is a partner in the effort to reduce nonpoint source pollution to the local waters. The SCD can provide a significant amount of financial assistance to local water quality efforts. Through its direct interaction with the local NRCS district conservationist, the SCD can also direct technical as well as administrative assistance to local water quality projects. The SCD also serves as a leader in the effort to increase water quality education of the local citizens and operators.

Smoky Mountain RC&D Council

The local RC&D Council will manage the project as well as perform BMP implementation and public awareness. The RC&D's ability in these areas is important to the generation of projects now and in the future.

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TVA-Resource Stewardship Watershed Team Program

TVA water quality professionals have the ability to generate local citizenry involvement while providing a beneficial level of water quality expertise. Water quality monitoring, as well as aerial photography landuse inventory capabilities from TVA, provide substantial technical support to this watershed effort. Moreover, TVA has the financial capability of funding ancillary projects, which could assist in promoting many of the needed BMPs for this specific watershed.

U.S. Army Corps of Engineers (USACE)

USACE has been active in the Nolichucky River watershed by initiating a Water Resources: Reconnaissance Study: Phase I [905(b)], based upon a local petition for the federal government to remedy the flooding problems, which have developed in the Little Pigeon River watershed due to development. USACE will partner with the City of Sevierville and Sevier County to complete this investigation into means of reducing stormwater discharge to Little Pigeon River.

CURRENT 319 PROJECTS

FY-2000 (UWA) French Broad River Water Quality Restoration Project:
Little Pigeon River-East Fork/Dunn Creek Sevier Co. SCD

CURRENT MONITORING & ASSESSMENT

TDEC-WPC five-year watershed management approach
TDH-DLS pre- and post- BMP monitoring

MEASURES OF SUCCESS

- UWA projects have been implemented in all 303(d) listed subwatersheds.
- Post BMP implementation monitoring results are indicating an overall improvement of the water quality of the streams directly affected by BMP implementation.
- The subwatersheds, once 303(d) listed, have been removed due to sufficient water quality improvements.

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MILESTONES

Long Term Goal 1.

Hold regularly scheduled meetings with stakeholders, to create new partnerships, strengthen existing partnerships and to foster greater trust, commitment and accountability.

- **Action:** Conduct an annual priority watershed partners meeting for project coordination.
Lead: TDA-NPS Program
Key Partners: TDEC-WPC; USDA-NRCS; TDH-DLS; local governments
Year(s): 2001-2005
- **Action:** Develop a Watershed Restoration Action Strategy.
Lead: TDA-NPS Program
Key Partners: TDEC-WPC; USDA-NRCS; TDEC-DWS-GWMS
Year(s): 2001

Long Term Goal 3.

Restore all waters impaired by nonpoint sources that are listed on the 1998 303(d) List to the condition of fully supporting their designated uses by 2015, in cooperation with local, state and federal partners.

- **Action:** Twenty percent of the needed BMPs will have been installed in the French Broad watershed.
Lead: USDA-NRCS; SCD and RC&D
Key Partners: TDA-NPS Program
Year(s): 2005
- **Action:** One hundred percent of the needed agricultural BMPs will have been implemented in the French Broad – Little Pigeon River – East Fork Dunn Creeks subwatersheds.
Lead: USDA-NRCS; RC&D; SCD
Key Partners: TDA-NPS Program
Year(s): 2005

Long Term Goal 5.

Improve the knowledge of stakeholders and citizens concerning the origins, magnitude, and prevention of nonpoint source pollution.

- **Action:** Develop at least two educational projects to educate the local citizens, landowners, and elected officials in the French Broad – Little Pigeon River – East Fork Dunn Creeks subwatersheds.
Lead: TDA-NPS Program
Key Partner: TDEC-WPC; USDA-NRCS; SCD; TVA
Year(s): 2005



Long Term Goal 7.

Use the maximum allowable percentage of funding annually to assist partners with water quality monitoring and assessment, for the duration of the 319 program.

- **Action:** One hundred percent of the pre-BMP implementation monitoring will have been completed in the French Broad – Little Pigeon River – East Fork Dunn Creek subwatersheds.
Lead: TDEC-WPC and TDH-DLS
Key Partners: TDA-NPS Program
Year(s): 2005
- **Action:** The water quality of the French Broad – Little Pigeon River – East Fork Dunn Creek subwatersheds will be improved.
Lead: TDEC-WPC
Key Partners: TDH-LDS and TDA-NPS Program
Year(s): 2005